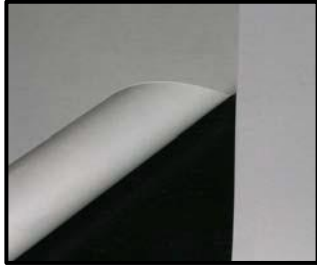


## dBRock – Constrained Layer Damping for walls and floors

dBRock is a viscoelastic material in combination with a 1#/ft<sup>2</sup> Whispermat barrier layer for added mass to improve the sound transmission loss particularly at mid to high frequencies that can be used to bond panels together, providing constrained layer damping to sheet rock walls and hardwood floors.



Apply dBRock to first layer of sheet rock which is already installed on wall

dBRock reduces the impact noise from foot traffic on hard wood floors by damping the resonant frequencies in the structure from the impacts.

The room to room noise penetration from home entertainment centers or musical instruments is

also greatly reduced.

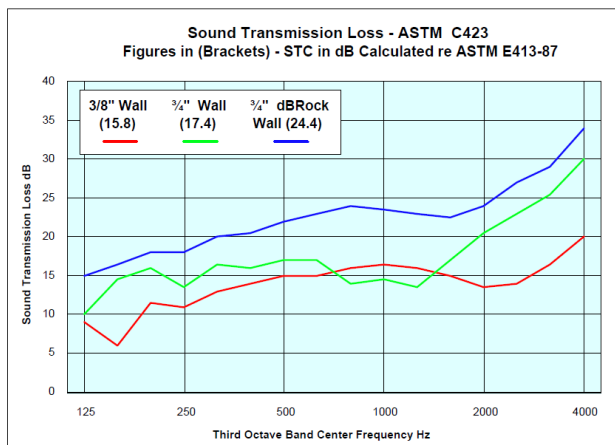


## Material – Typical Physical Properties

Delivery form	Sheets 48"(1220mm) x 27" (686mm)
Weight	1#/ft <sup>2</sup> (4.9Kg/m <sup>2</sup> )
Tear Strength	85 #/in-min (25kg/m-s) ASTM D624 Die C
Tensile	430 psi min.(3MPa min) ASTM D412

## Sound Transmission

Replacing normal wall construction with dBRock improves the transmission loss in two critical regions.



matching reduces the sound transmission blocking effect of the panel severely.

Unfortunately for typical walls and floors, this coincidence frequency occurs at about 1000Hz, which is also the frequency at which the human ear is most sensitive. dBRock, through its efficient damping of bending waves, effectively removes any loss to the sound barrier performance of the wall panel.

First: at the resonance frequencies of the structure the peak vibration levels are reduced about 10 fold. This will be particularly noticeable in the reduction of impact noise such as the sound of people walking on hard wood floors

Second: at mid to high frequencies there is a phenomenon referred to as the coincidence frequency. This is the sound that has the same wavelength in air, as does the bending wave in the panel at the same frequency. This wavelength

